

# MOBILE DATALOGGERS

Battery operated recorders



- Built-in battery operated GSM modem
- Text message alerts
- Data collecting to Comet database software and Comet cloud



**OMET**  
since 1991



# Battery operated GSM modem Mobile Dataloggers



Web browser for data displaying



Replaceable antenna.

Two buttons keypad for device control.

Large display for easier readability of current value, MIN/MAX value; alarm indication.

3-colour LED for alarm.

Internal T/RH sensor protected by teflon foil.

Connector USB-C for simple connection and battery charging (SMS and CO<sub>2</sub> loggers).

Connectors for removable and interchangeable probes.

## Measurement and monitoring

- Temperature
- Humidity
- Dew point
- Two-state inputs
- Counter

Mobile Data loggers measure physical quantities such as temperature, dew point, humidity and monitor also two-state signals or count pulses. The measuring interval can be set up from 1s to 24h. The measured value is shown on LCD display as well as MIN / MAX value.

## Alarm indication

- Exceeding of alarm limits on the channel
- Device failure
- Battery condition
- Memory occupancy
- External power failure

For each measurement channel can be set upper and lower limits. In case the limits are exceeded these alarm is indicated on the display, visually by LED or acoustically. Built-in GSM modem allows to send alarm via SMS as text message. Users can be also informed about device failure, battery and memory state or external power failure. The device also supports Latched alarms - every alarm occurring in the device remains active until some operator's action, irrespective of the measurement values (until the time of manual cancel).

## Record

- Non-cyclic record mode
- Cyclic record mode (FIFO)
- Recording continuously
- Recording at the alarm time

Recording can be performed continuously or at the alarm time only. Measured data can be stored in memory at intervals from 1s to 24h. Logging mode can be adjusted as non-cyclic, when logging stops after filling the memory or cyclic, when the oldest recorded values are overwritten by new ones after memory is full (first in first out). Up to 500 000 values can be stored in memory.

## Data transmitting via GSM

- Alarm indication via SMS as texts
- Keep alive texts
- Data collecting to Comet cloud and software via GSM

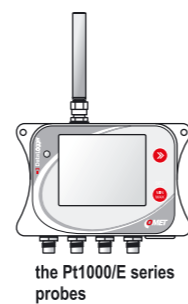
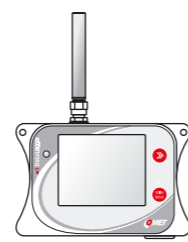
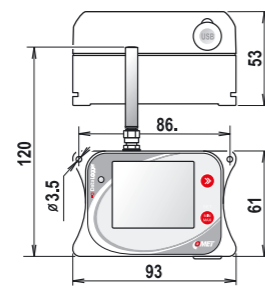
Built-in battery operated GSM modem allows alarm indication and data transmitting. Data can be sent in the shortest interval of 5min to Comet database software or Comet cloud thru data network. For saving battery live there is a function of data buffering to keep GSM modem in the sleeping mode for longer time. Users can also set up keep alive texts which periodically inform of current state.

Measured values		Temperature		Temperature, relative humidity		Temperature, two-state inputs	Two-state inputs, counters
DATALOGGER MODELS		U0110M	U0141M	U3120M	U3121M	U0843M	U7844M
temperature	range	-20 to +60°C	-90 to +260°C	-20 to +60°C	according to probe	-90 to +260°C	-
	accuracy	±0,4°C	±0,2°C	±0,4°C	according to probe	±0,2°C	-
relative humidity	range	-	-	0 to 100 % RH	according to probe	-	-
	accuracy (from 5-95% at 23°C)	-	-	±1,8 %RH**	according to probe	-	-
dew point		-	-	-60 to +60 °C	according to probe	-	-
two-state inputs (counter)						2	4*
powering	battery	Li-ion accumulator SONY 2x 2600mAh					
	charger current, USB	maximum battery charging current is limited to 2.25 A, via USB 500mA					
typical battery life		> 6 months to several years, according to the device setting and number of messages sent					
IP protection class		IP67				IP20	

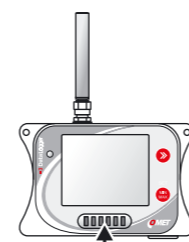
\* two of them can be used as a counter \*\* sensor accuracy at 23°C in the range of 0 to 90 %RH (hysteresis ±1 %RH, non-linearity ±1 %RH)



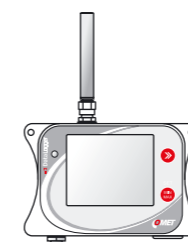
Micro size SIM card supported



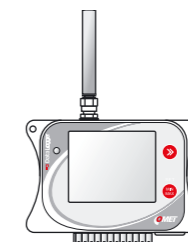
the Pt1000/E series probes



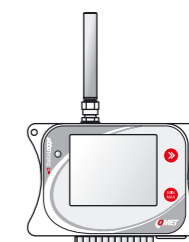
temperature and rel. humidity sensor



the Digi/E series probe



2 x Pt1000 probe  
2 x binary input

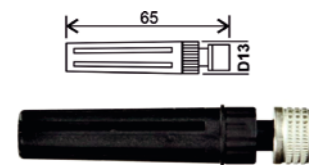


2 x binary input  
2 x counter / binary input

## External temperature probes

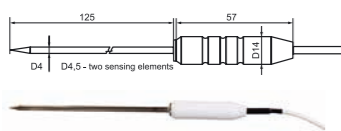
Temperature probes on the cable are designed to measure the temperature in specific applications. Probes are supplied in lengths of 1, 2, 5 and 10 meters. Probes are manufactured in accuracy of class A, unless stated otherwise.

Fast accurate air probe with fast response time without protection against moisture.



200-80/E, Pt1000  
(-30°C to +80°C)

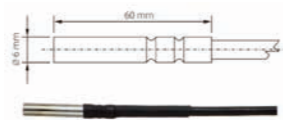
Hand-held pointed tip probe for food industry with teflon handle and silicon cable.



2061-200/E, Pt1000  
(-30°C to +200°C)

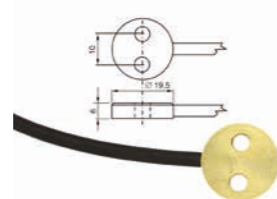
The complete range of probes can be found at [www.cometsystem.com](http://www.cometsystem.com)

Universal temperature watertight probe with IP68 for long-term monitoring of temperature in liquids.



Pt1000TG68/E  
(-80°C to +200°C)

Brass probe for surface temperature measurements. Probe is not resistant to moisture.



Pt1000TG7/E  
(-30°C to +200°C)

## External temperature /humidity probes

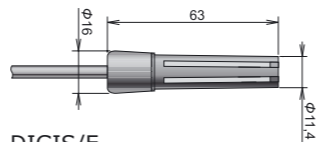
The probe is interchangeable with calibration certificate. The probe line wire must not exceed 30 m.

Ultra thin digital probe.



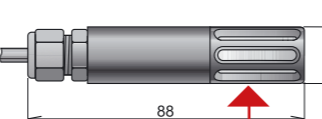
DIGIH/E  
(-10 to +60 °C; 0 to 100% RH)

Low cost probe without filter mesh.



DIGIS/E  
(-10 to +60 °C; 0 to 95% RH)

Probe with interchangeable protection filter.



DIGIL/E  
(-30 to +105 °C; 0 to 100% RH)

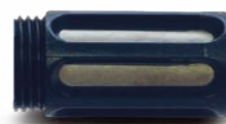
## Sensor covers for external probes



**F5300** - Teflon (PTFE) sensor cover (white colour), with increased resistance against splashing water, non-absorbent surface, does not rust. Porous size 25µm. Temperature range -40°C to +125°C.



**F0000** - sintered bronze sensor cover for moderate aggressive environments. Filtering ability 0.025mm.



**F5200B** - sensor cover with filter from stainless steel mesh, suitable for moderately dusty environment. Filtering ability 0.025 mm.

## Improved protection

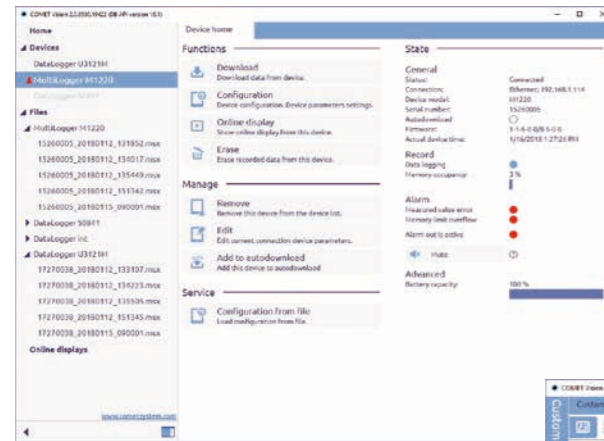


**F8100** - Solar radiation shield for better protection of dataloggers and more accurate measurement.

Power supply and USB-C cable are included



# Analytic and configuration software COMET Vision 2.0



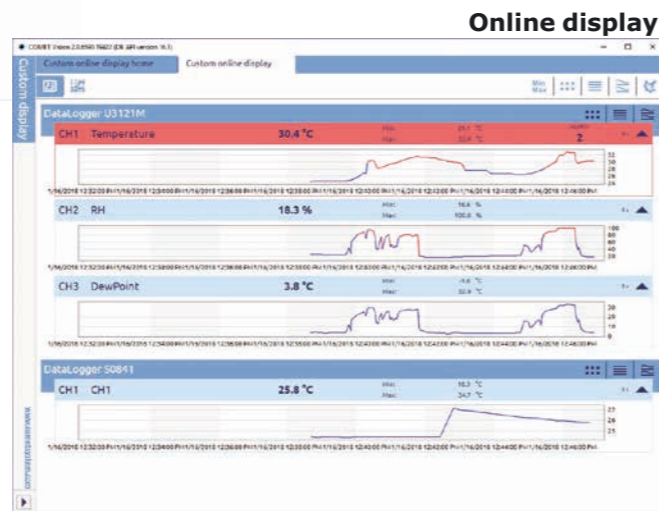
Device list and device panel



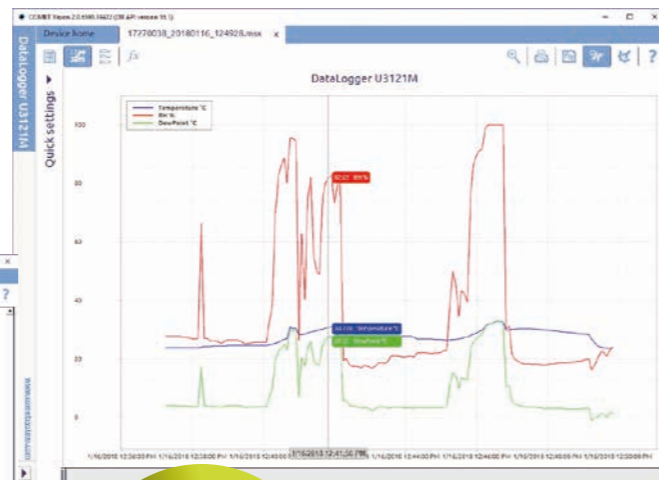
Recorded data

## Data analysis

The recorded data can be transferred to a PC via USB cable or via GSM network for further analysis. Obtained values can be displayed in the form of a table or graph, data and reports can be printed or exported for further processing of spreadsheet software. Comet Vision software 2.0 allows setting of device and simple data analysis. Comet database software allows collecting data from unlimited numbers of Comet devices and displaying measuring channels from unlimited number of devices on one screen. Comet cloud supports easy online access to measured data.



Online display



Graphs by channels



- download
- analyse
- present data
- print out reports

# Storage place for all COMET devices COMET CLOUD and Database software



- 24 hours supervision
- unlimited data storage
- simple and clear access to your measured values
- single repository for all devices COMET
- alarm SMS texts and e-mails
- acoustic and visual signalization of alarms

# GSM MODEM DATALOGGERS

battery operated recorders



COMET SYSTEM, s.r.o.  
Bezrucova 2901  
756 61 Roznov pod Radhostem  
CZECH REPUBLIC  
Tel: +420-571653990  
Fax: +420-571653993  
E-mail: [info@cometsystem.com](mailto:info@cometsystem.com)  
[www.cometsystem.com](http://www.cometsystem.com)